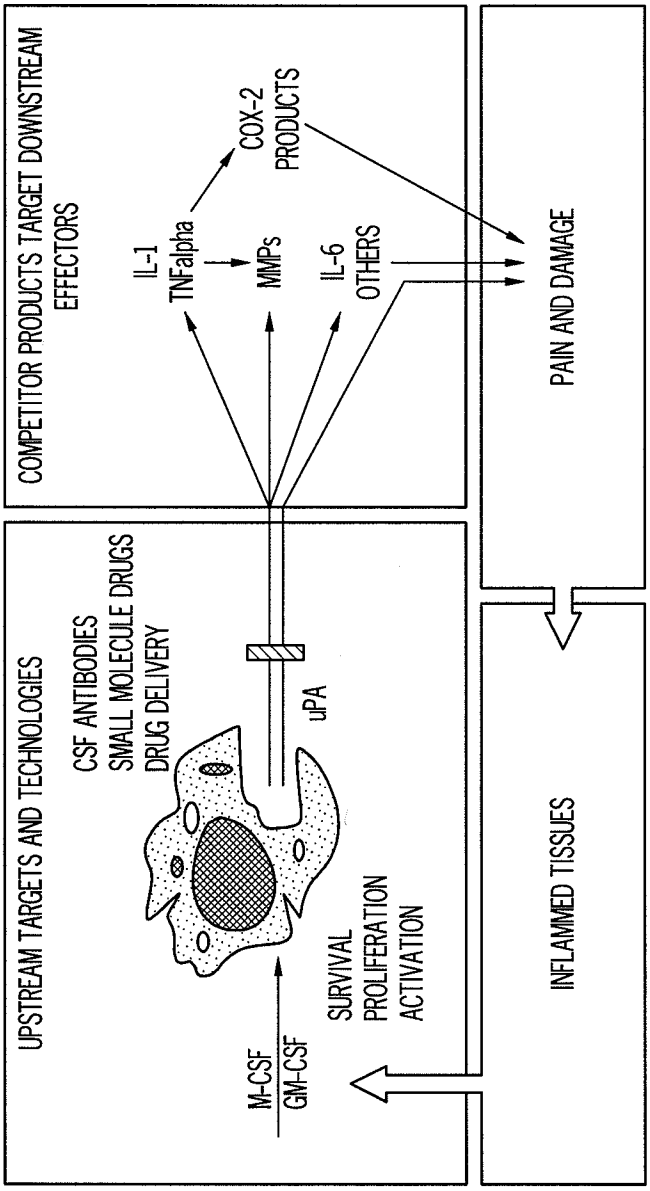
COMPETITOR PRODUCTS TARGET DOWNSTREAM EFFECTORS
IL-1
TNFalpha
COX-2
PRODUCTS
MMPs
IL-6
OTHERS
PAIN AND DAMAGE
UPSTREAM TARGETS AND TECHNOLOGIES
CSF ANTIBODIES
SMALL MOLECULE DRUGS
DRUG DELIVERY
uPA
M-CSF
GM-CSF
SURVIVAL
PROLIFERATION
ACTIVATION
INFLAMMED TISSUES

FIG. 1

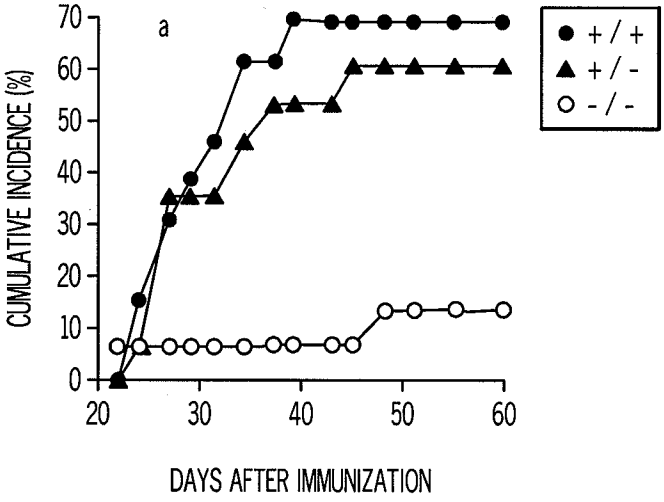
a
CUMULATIVE INCIDENCE (%)
DAYS AFTER IMMUNIZATION
+ / +
+ / -
- / -
0
10
20
30
40
50
60
70
20
30
40
50
60

FIG. 2A

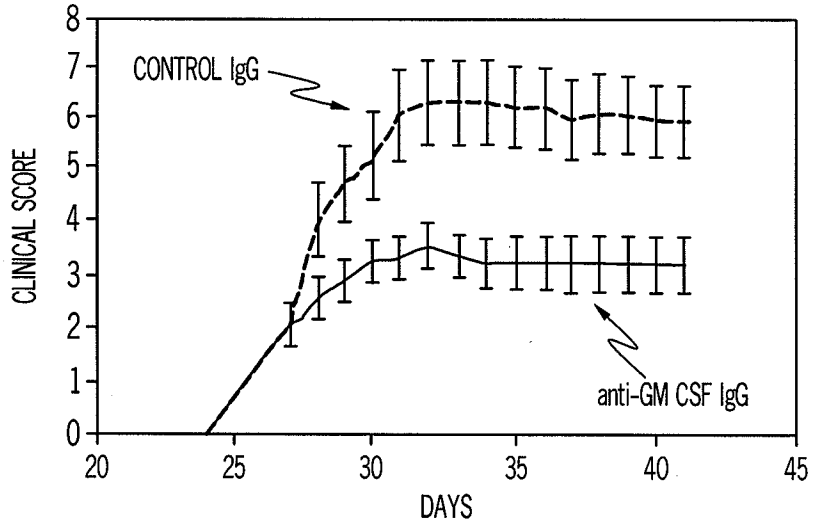
CONTROL IgG
anti-GM CSF IgG
CLINICAL SCORE
DAYS
0
1
2
3
4
5
6
7
8
20
25
30
35
40
45

FIG. 2B

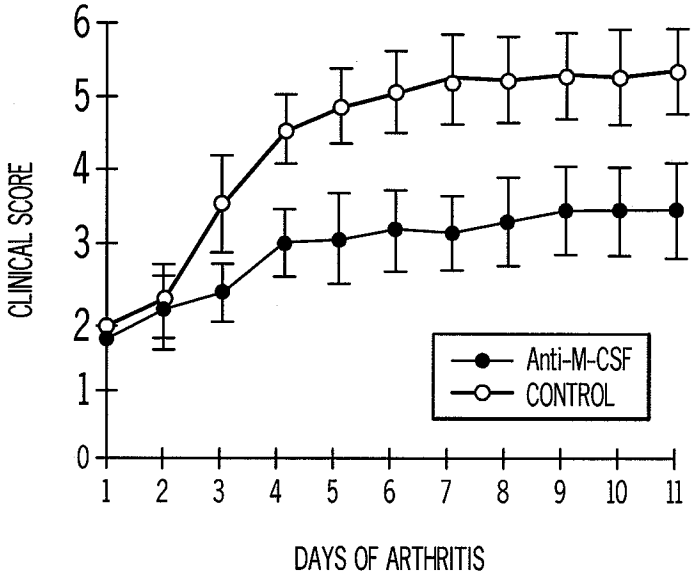
CLINICAL SCORE
0
1
2
3
4
5
6
1
2
3
4
5
6
7
8
9
10
11
DAYS OF ARTHRITIS
Anti-M-CSF
CONTROL

FIG. 2C

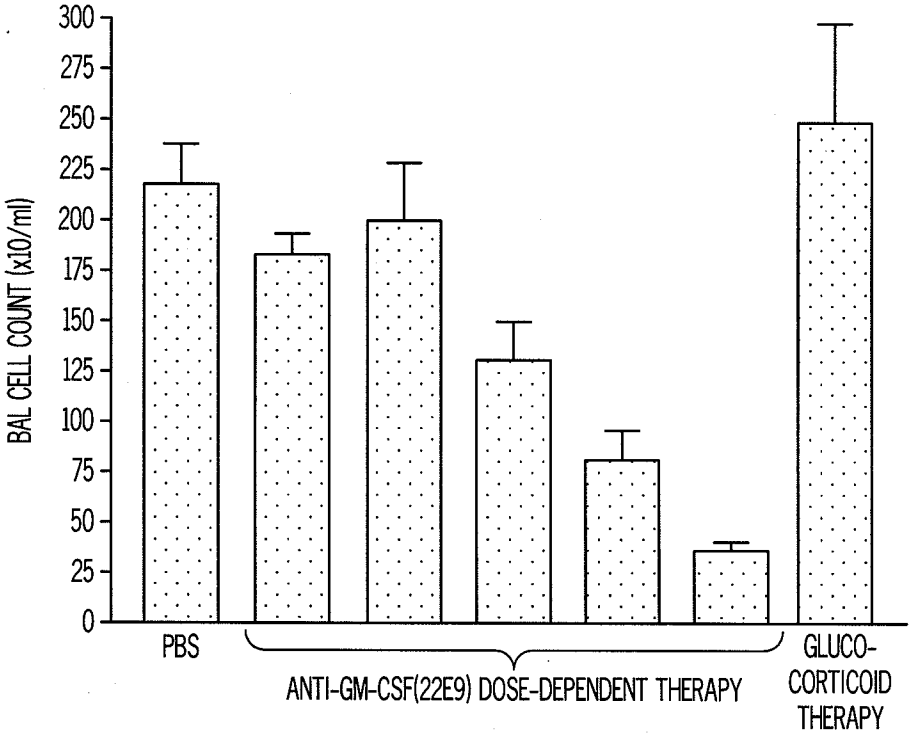
BAL CELL COUNT (x10/ml)
0
25
50
75
100
125
150
175
200
225
250
275
300
PBS
ANTI-GM-CSF(22E9) DOSE-DEPENDENT THERAPY
GLUCO-
CORTICOID
THERAPY

FIG. 3A

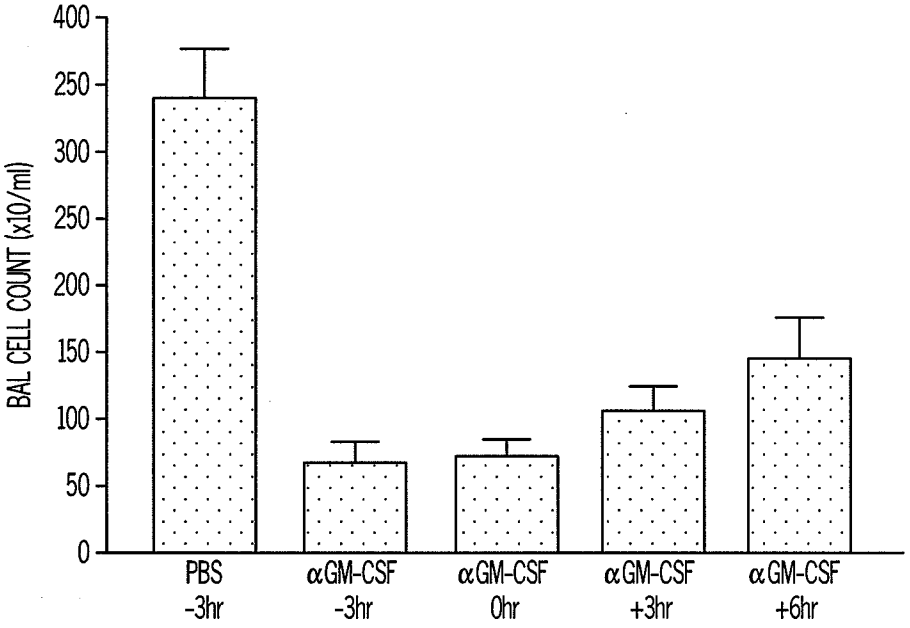
BAL CELL COUNT (x10/ml)
400
250
300
250
200
150
100
50
0
PBS -3hr
αGM-CSF -3hr
αGM-CSF 0hr
αGM-CSF +3hr
αGM-CSF +6hr

FIG. 3B

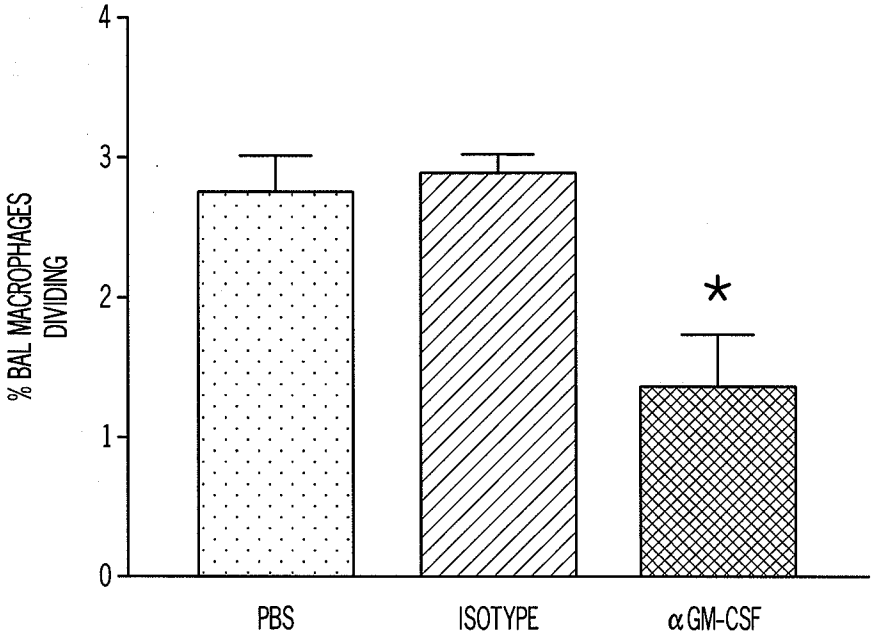
% BAL MACROPHAGES DIVIDING
4
3
2
1
0
*
PBS
ISOTYPE
αGM-CSF

FIG. 3C

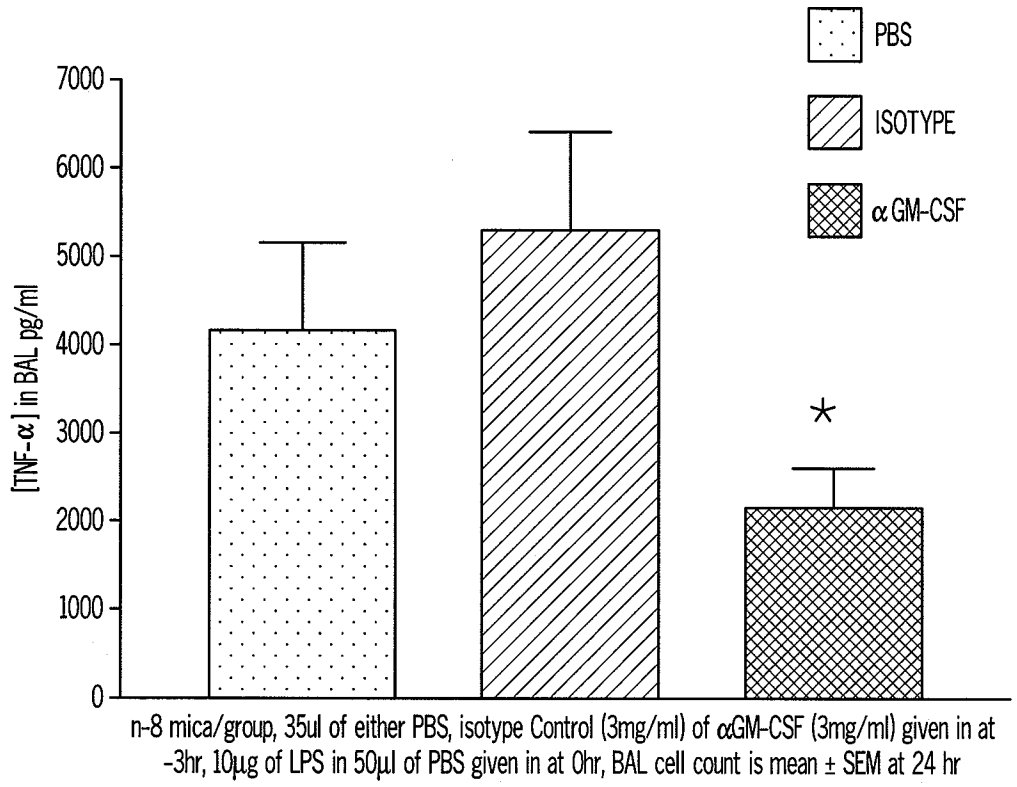
PBS
ISOTYPE
αGM-CSF
[TNF-α] in BAL pg/ml
7000
6000
5000
4000
3000
2000
1000
0
*
n-8 mica/group, 35ul of either PBS, isotype Control (3mg/ml) of αGM-CSF (3mg/ml) given in at -3hr, 10μg of LPS in 50μl of PBS given in at 0hr, BAL cell count is mean ± SEM at 24 hr

FIG. 3D

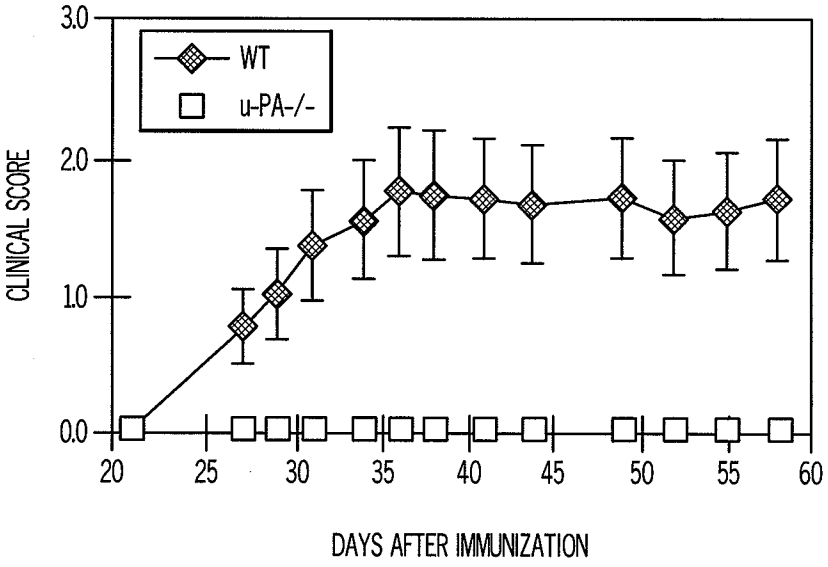
3.0
2.0
1.0
0.0
CLINICAL SCORE
WT
u-PA-/-
20
25
30
35
40
45
50
55
60
DAYS AFTER IMMUNIZATION

FIG. 4

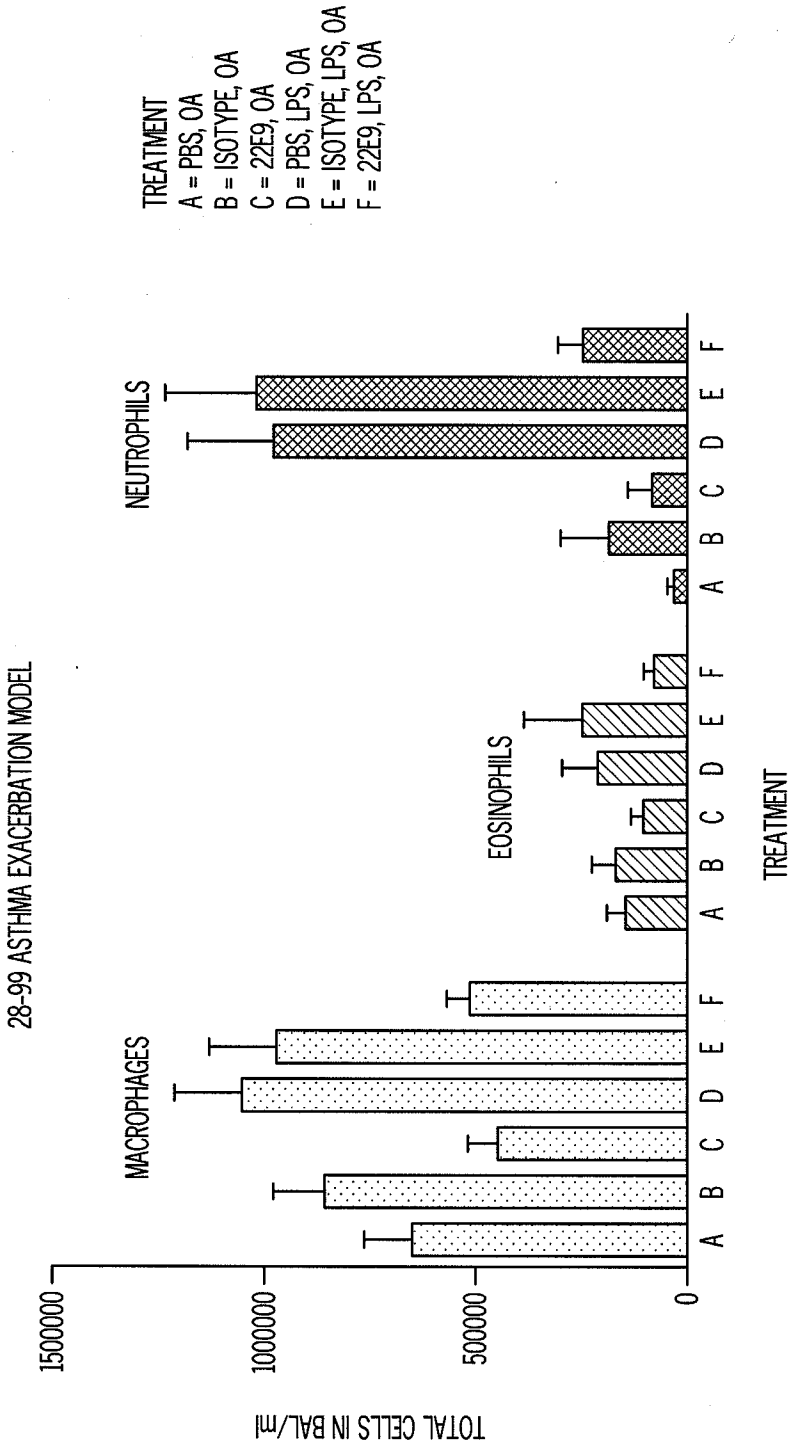
28-99 ASTHMA EXACERBATION MODEL
TOTAL CELLS IN BAL/ml
1500000
1000000
500000
0
MACROPHAGES
EOSINOPHILS
NEUTROPHILS
A B C D E F
TREATMENT
TREATMENT
A = PBS, OA
B = ISOTYPE, OA
C = 22E9, OA
D = PBS, LPS, OA
E = ISOTYPE, LPS, OA
F = 22E9, LPS, OA

FIG. 5